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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,725	09/09/2003	Ed H. Frank	14180US02	2800
23446 7590 12/28/2009 MCANDREWS HELD & MALLOY, LTD 500 WEST MADISON STREET SUITE 3400 CHICAGO, IL 60661				
EXAMINER				
THIER, MICHAEL				
ART UNIT		PAPER NUMBER		
2617				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/658,725

Applicant(s)

FRANK ET AL.

Examiner

MICHAEL T. THIER

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10/28/2009 (i.e. BPAI decision).
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Prosecution is hereby reopened after the board decision reversing the examiners previous rejection. However, upon further consideration, a new ground(s) of rejection is made in view of Dokko (US 7089016).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Choksi (US 6978144) in view of Sundar et al. (US 2003/0134650) in further view of Dokko (US 7089016).

Regarding claims 1, 9, and 17. Choksi discloses a method, system, and machine readable storage for providing bandwidth management in a hybrid wired/wireless local area network (Abstract, column 4 lines 18-26), the method comprising:

receiving from at least one of a first access point and a first switch, at least a first messaging protocol message (call admission request is submitted- Column 7, Lines 5-15 and 33-41);

responsive to said first messaging protocol message, determining an available

communication bandwidth for at least a portion of the hybrid wired/wireless local area network (current bandwidth usage plus the requested bandwidth must not exceed a threshold - Column 7, Lines 61-67; Column 8, Lines 1-5; radio link can be an 802.11 based WLAN Column 3, Line 35); and

allocating bandwidth to accommodate said communication session (read as the request is allowed- Column 8, lines 1-5).

However, Choksi discloses the allocation of resources and allowance of call admission requests, but fails to specifically disclose the notification to the first access point of the communication system to commence the connection.

Sundar discloses a call connection management system for hybrid wired/wireless (WWAN and WLAN) networks which performs call setup functions such as channel assignment based upon requests from users. During the call connection setup, initiated by, for example, a handoff scenario, the serving BSC informs the desired BSC of the desire to handoff, and once the operation is the complete, acknowledgements are returned to the initiating parties (Figure 12 - Page 6, Paragraphs 0074-0075).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to incorporate the teachings of Sundar with the teachings as in Choksi in order to provide users with necessary bandwidth to complete their communications and control a network so that it's bandwidth capabilities are not exceeded.

However, Choksi and Sundar do not specifically disclose that the first messaging protocol message is for establishing a communication session.

Dokko teaches a channel allocation system and method for radio data calls having different bandwidths (title and abstract). He teaches in column 4 lines 18-21 and 28-33 that a call set up request is received from the call processing unit 11 (which is a part of the mobile switching system 10 as shown in figure 1), and after the data call connection request is received, the system determines the required/allocated bandwidth based on the service option of the corresponding data call. Therefore, the data call connection request received from the call processing unit in the mobile switching system clearly reads on the claimed first messaging protocol message for establishing a communication session received from at least one of a first access point and a first switch.

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to incorporate the teachings of Dokko with the teachings as in the combination of Sundar and Choksi. The motivation for doing so would have been to create a channel allocation method and system that prevents traffic delay and effectively utilizes channel resources by allocating a channel according to bandwidth required by each call. (Dokko column 2 line 65 to column 3 lines 2)

Regarding claims 2, 10, and 18. Choksi as modified by Sundar and Dokko further discloses receiving said at least a first messaging protocol message by at least one of a second switch and a second access point (Sundar et al. - the serving WLAN MSC informs the desired WWAN BSC of the handoff requests - Figure 12, Steps 1204-1210 - Page 6, Paragraph 0074).

Regarding claims 3, 11, and 19. Choksi as modified by Sundar and Dokko

further discloses requesting bandwidth usage information from at least one of said first access point and said first switch using said at least a first messaging protocol (Choksi - call admission request are single bandwidth requests - Column 7, Lines 42-48).

Regarding claims 4, 12, and 20. Choksi as modified by Sundar and Dokko further discloses de-allocating said allocated bandwidth using at least a third messaging protocol message subsequent to termination of said established communication session (Sundar et al. - once the mobile has handed off to the WWAN, the WWAN notifies the WLAN MSC that it may clear the resources previously allocated for the mobile - Figure 12, steps 1226-1228 - Page 6, Paragraph 0074).

Regarding claims 5, 13, and 21. Choksi as modified by Sundar and Dokko further discloses sending said at least a third messaging protocol message from at least one of said second switch and said second access point to at least one of said first switch and said first access point (Sundar et al. - once the mobile has handed off to the WWAN, the WWAN notifies the WLAN MSC that it may clear the resources previously allocated for the mobile - Figure 12, steps 1226-1228- Page 6, Paragraph 0074).

Regarding claims 6, 14, and 22. Choksi as modified by Sundar and Dokko further discloses receiving bandwidth information from at least one of a quality of service management process, a load balancing management process, a session control process, and a network management process using at least a fourth messaging protocol message (Choksi - QoS policy is retrieved during the bandwidth allocation request- Column 6, Lines 60-67 and Column 7, Lines 5-15).

Regarding claims 7, 15, and 23. Choksi as modified by Sundar and Dokko

further discloses requesting said bandwidth information from said quality of service management process, said load balancing management process, said session control process, and said network management process using a fifth messaging protocol message (Choksi – QoS policy is retrieved during the bandwidth allocation request - Column 6, Lines 60-67 and Column 7, Lines 5-15).

Regarding claims 8, 16, and 24. Choksi as modified by Sundar and Dokko further discloses that said first, second, third, fourth, and fifth messaging protocol messages each comprise at least one message selected from the group consisting of an access point status message, access point configuration message, a switch status message, a switch configuration message, a client status message, and a device discovery message (Choksi - the messages request the status of the access points, hence gaining their status and configuration - Column 7, Lines 42-47; Sundar et al. - device discovery is used to determine available networks - Page 4, Paragraphs 0055-0057; Sundar et al. - BSCs determine statuses of access points to perform call connections- Page 6, Paragraph 0074).

Regarding claim 25. Choksi as modified by Sundar and Dokko further discloses that at least one controller is a bandwidth management controller, a quality of service controller, a load balancing controller, a session controller, and a network management controller (Choksi- Column 4, Lines 18-46).

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL T. THIER whose telephone number is

(571)272-2832. The examiner can normally be reached on Monday thru Friday 7:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached on (571) 272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MICHAEL T THIER/
Examiner, Art Unit 2617
11/2/2009

/Patrick N. Edouard/
Supervisory Patent Examiner, Art Unit 2617